



OPEN SOURCE TECHNOLOGY

Contact Hours per week: 5hrs

Contact Hours per Semester: 65 hrs

Credit: 4

Subject Code: P1CSC31

Objective:

- Understand Linux Programming and make them to develop applications using it.
- Understand the programming constructs of PHP Scripting Language
- Work with PHP and interact with MySQL database.
- Developing web pages using PHP and HTML forms.

Unit I

(12 hours)

Getting started - Introduction to UNIX, Linux and GNU - Programming Linux.

Shell Programming - basics - Pipes and Redirection - The Shell as a Programming Language – shell syntax

Working with files - Linux File Structure - System Calls and Device Drivers - Library Functions - Low-Level File Access - The Standard I/O Library

Unit II

(12 hours)

Working with files - Formatted Input and Output - File and Directory Maintenance - Scanning Directories - Errors - The / proc File System.

The Linux Environment - Program Arguments - Environment Variables - Time and Date - Temporary Files - User Information - Host Information - Logging Resources and Limits.

Terminals - Reading from and writing to the Terminal - Talking to the Terminal - The Terminal Driver and the General Terminal Interface - The termios structure - Terminal Output - Detecting Keystrokes.

Unit III

(14hours)

Why PHP & MySQL – What is PHP? – What is MySQL? – Reasons to love PHP and MySQL

Server - Side Web Scripting - Static HTML - Client-Side Technologies - Server-Side Scripting - What Is Server-Side Scripting Good for?

Syntax and Variables – Comments – variables – simple types – outputs

Control and Functions – Boolean expressions – branching – looping –terminating execution – using functions – function documentation – defining your own function – functions and variable scope – function scope

Unit IV

(13 hours)

Passing Information between Pages - GET Arguments - POST Arguments - Formatting Form Variables - PHP Super global Arrays.

String - Strings in PHP - String Functions.

Arrays and Array Functions - Creating Arrays - Retrieving Values - Multidimensional Arrays - Inspecting Arrays - Deleting from Arrays - Iteration.

Numbers - Numerical Types - Mathematical Operators - Simple Mathematical Functions - Randomness.

Unit V

(14 hours)

PHP/MYSQL Functions - Connecting to MySQL - Making MySQL Queries - Fetching Data Sets - Multiple Connections - Error Checking - Creating MySQL Databases with PHP - MySQL Functions.

Displaying Queries in Tables - HTML Tables and Database Tables - Complex mapping - Creating the sample Tables.



VIRUDHUNAGAR HINDU NADARS' SENTHIKUMARA NADAR COLLEGE

(An Autonomous Institution Affiliated to Madurai Kamaraj University)

[Re-accredited with 'A' Grade by NAAC]

Virudhunagar – 626 001

Building Forms from Queries - HTML Forms - Basic Form Submission to a Database - Self Submission - Editing Data with an HTML Form.

Textbook:

- 1) Neil Matthew and Richard Stones (2009). Beginning Linux Programming, 4/e; New Delhi: Wiley-India
- 2) Tim Converse and Joyce Park with Clark Morgan (2008). PHP 5 and MySQL Bible; New Delhi: Wiley-India

Unit I: Chapter 1, 2, 3(Text book 1)

Unit II: Chapter 3, 4, 5(Text book 1)

Unit III: Chapter 1, 2, 5, 6(Text book 2)

Unit IV: Chapter 7, 8, 9, 10(Text book 2)

Unit V: Chapter 15, 16, 17(Text book 2)

Reference Book:

Open Source Technology, Kailash Vadera, Bhavyesh Gandhi, Laxmi Publications